

**Charge for
Director's CD-3b Review of
MINERvA**

June 11-12, 2007

This charge is for the Director's CD-3b Review of MINERvA. This project was given CD-1/2/3a approval by Dr. Staffin, the Acquisition Executive, on March 30, 2007. The project is proceeding with detailed design and will be requesting "Approval to Start Full Construction" CD-3b late this fiscal year. A DOE/SC/OHEP CD-3b Review is anticipated in August to allow for an ESAAB approval in time to utilize FY08 MIE appropriations as soon as they are available. One goal of this Director's Review is to help assure MINERvA will be ready for the OHEP Review.

In carrying out this charge, please respond to the following questions:

1. Are the project's cost, schedule, and technical baselines appropriate and consistent with those approved in March 2007? Is there adequate progress to meet the baseline objectives?
2. Are the designs of the technical systems sufficiently mature to support the hardware procurements planned in FY 2008?
3. Is there adequate contingency (cost and schedule) to address the risks inherent in the remaining work and is it being properly managed? Is the contingency supported by and consistent with an appropriate project-wide risk analysis?
4. Is the project being managed (e.g., properly organized, adequately staffed) as needed to proceed with construction? Is there adequate support from Fermilab and the MINERvA collaborating institutions to proceed with construction?
5. Are ES&H aspects being properly addressed?
6. Has the project responded appropriately to recommendations from prior DOE/SC and Fermilab Director's Reviews?
7. Has the MINERvA project provided satisfactory responses to the attached CD-3 "Scorecard?"

Please respond to these questions in a Closeout Session with the MINERvA team and Fermilab management and submit a written report within a few weeks of the completion of the review.

“Scorecard” for CD-3

4.0 SCOPE OF REVIEW FOR CONSTRUCTION OR EXECUTION READINESS (In support of CD–3)

The purpose of the Construction or Execution Readiness Review is to assess the readiness for construction or execution and to confirm the completeness and accuracy of the Performance Baseline. The Scope of review has several elements relative to construction readiness, but retains many of the elements contained in the Performance Baseline Review. The Required Documentation is also presented below.

4.1 Scope of Review

For each of the review elements, the following are suggested lines of inquiry for the IPR Team to address.

1. Final Drawings and Specifications.

Assess completeness and quality of drawings and design specifications. This is typically accomplished by reviewing selected construction elements or systems, including the key project elements posing the more difficult construction challenges. Assess whether bid packages are sufficiently clear and well defined as to be ready for bid.

2. Construction/Execution Planning.

Assess adequacy of construction/project execution planning and staffing. Assess logistics including interface with operating facilities, infrastructure interfaces, adequacy of lay-down areas, temporary construction facilities, security and badging readiness, and other logistical elements. Federal and contractor staffing should also be reviewed to ensure adequate oversight of the work, including safety, performance, and quality.

3. Resource Loaded Schedule.

Review the Resource Loaded Schedule to ensure that it is consistent with the approved Performance Baseline at CD-2. Also assess the reasonableness of the schedule relative to the critical path.

4. Final Design Functions and Requirements/Site Final Design Review.

Assess whether all final design functions and requirements are reflected in the Performance Baseline, including safety and external requirements such as permits, licenses, and regulatory approvals. Also, assess whether all required changes from the Site Final Design Review are incorporated into the Performance Baseline.

5. Risk Management.

Assess whether the risk assessment has been updated, as appropriate, to address any new risks identified in final design. Assess whether cost and schedule contingency remains sufficient for project risks.

6. Value Management/Engineering.

Assess the application of Value Management/Engineering during Final Design, and if results have been incorporated into the Performance Baseline.

7. Acquisition Strategy.

Review the Acquisition strategy to determine if there have been any significant changes and if the acquisition approach continues to represent the best value to the government.

8. Project Execution Plan.

Review the Project Execution Plan and determine if it reflects and supports the way the project and construction effort is being managed. It should be updated to reflect any changes as a result of Final Design and be consistent with the other project documents.

9. Project Controls/Earned Value Management System.

Assess whether all appropriate project control systems and reporting requirements are in place and are being properly used to report project status.

10. Integrated Project Team.

Assess whether the staffing level is appropriate and determine if appropriate disciplines are included in the Integrated Project Team. Identify any deficiencies in the Integrated Project Team that could hinder successful construction or execution.

4.2 Required Documentation

In general, the following documents are required for the Construction or Execution Readiness Review. Other associated material may be requested to ensure a complete and accurate review is performed.

- Final Design Drawings and Specifications
- Results of and Responses to Site Final Design Review
- Construction Planning Document
- Project Execution Plan
- Detailed Resource Loaded Schedule
- Detailed Cost Estimate
- System Functions and Requirements Document
- Risk Management Plan/Assessment
- Safety Documentation
- Acquisition Strategy
- Value Management/Engineering Report
- * Funding Profile